

# Fundamentals of Bioagricultural Sciences and Pest Management

Fall 2012 Course syllabus

Monday/Wednesday 11-11:50 in C021 Plant Sciences

## Course Instructors:

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## General Course Objectives

This course was designed to (a) introduce incoming students to BSPM faculty and their diverse research areas and expertise, (b) introduce new students to each other, (c) create a common language among students to facilitate dialog among different research areas, and (d) foster critical thinking about the scientific literature and the student's own research programs

## Specific objectives include:

1. Gain specific content knowledge and vocabulary in the major areas encompassed by BSPM
2. Strengthen critical thinking skills involving the analysis and interpretation of data
3. Develop written and oral communication skills

## Course Structure

The course is structured with one lecture (Monday) and one discussion session (Wednesday) per week. In lecture, a topic will be presented from different BSPM faculty either on their own work or key work from their field. At the end of this lecture period 1-2 papers will be assigned for the Wednesday discussion. To help develop communication skills, discussion sections will be student led and weekly leaders will be selected by the roll of dice.

## Methods of Evaluation

The class will be evaluated on a 100-point scale. Details of assignments to follow.

- (1) Participation (70 points)
  - engaging in and leading discussions
  - asking the presenting faculty questions
- (2) 5 minute presentations on your background and research interests (10 points)
  - 5 September
- (3) A three page, single-spaced research proposal fashioned after a Letter of Intent (15 points)
  - this is focused on developing each students research ideas, and ideally will form the foundation of their research proposal for their committee and/or the foundation of an introductory chapter of their thesis/dissertation
  - 15 October; first draft due for peer review
  - 12 November; final draft due
- (4) Peer Review of fellow students research paper (5 points)
  - 22 October

**Course Schedule, Due dates and Topic Areas**

<b>Date</b>	<b>Schedule</b>	<b>General subject area of speakers</b>	<b>Notes</b>
20-Aug	No class		
22-Aug	Introduction		
27-Aug	Lou Bjostad	Chemical ecology of insects and plants	
29-Aug	discussion		
3-Sep	Labor Day; no class		
5-Sep	5 minute presentations		
10-Sep	Frank Peairs	Field crop entomology and integrated pest management (IPM)	Ruth and Courtney out
12-Sep	discussion	Matt Camper stands in for discussion	Ruth and Courtney out
17-Sep	Andrew Norton	Ecology and evolution of insects and hosts	
19-Sep	discussion		
24-Sep	Whitney Cranshaw	IPM of arthropod pests	
26-Sep	discussion		
1-Oct	Howard Schwartz	IPM of plant diseases	
3-Oct	discussion		Ruth out
8-Oct	Courtney Jahn	Bioenergy feedstock improvement	
10-Oct	discussion		
15-Oct	Deb Young	Scientific literacy and outreach ***Research paper due for peer review	
17-Oct	discussion		
22-Oct	Scott Nissen	Invasive weed species management ***Peer review due	Courtney out
24-Oct	discussion		Courtney out
29-Oct	Ned Tisserat	Turfgrass, tree, ornamental and small grain diseases and management	
31-Oct	discussion		
5-Nov	Boris Kondratieff	Systematics of insects	
7-Nov	discussion		
12-Nov	Cini Brown	Grassland invasions and restoration, global environmental change ***Final Paper due	
14-Nov	discussion		
19-Nov	Thanksgiving week		
21-Nov	Thanksgiving week		
26-Nov	Bill Jacobi	Diseases and insects of forest and shade trees	
28-Nov	discussion		
3-Dec	Paul Ode	Behavior and ecology of parasitoid wasps	
5-Dec	discussion		